Sept. 14, 1926. 1,599,862

N. M. BAKER

TRIAL RING

Filed Nov. 26, 1923

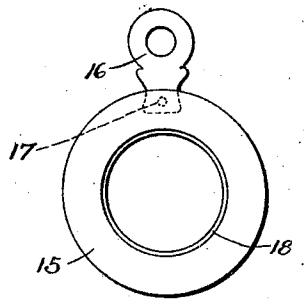


Fig. 1.

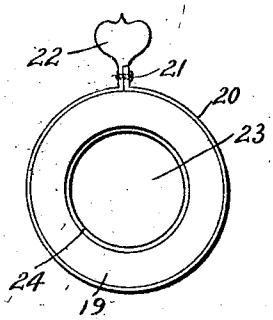


Fig. 2.

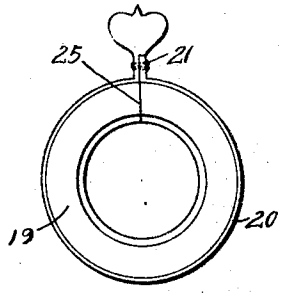


Fig. 3.

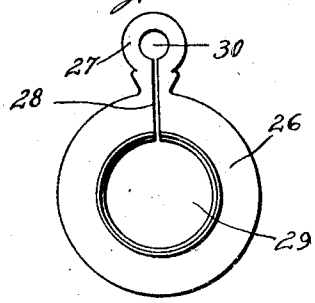


Fig. 4.

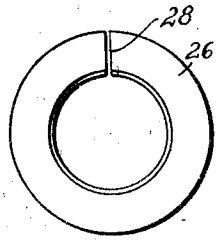


Fig. 5.



Fig. 6.

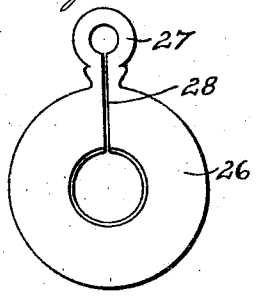


Fig. 7.

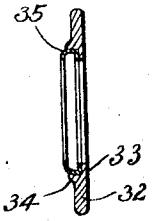


Fig. 8.

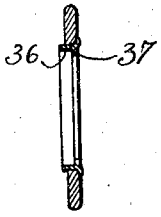


Fig. 9.



Fig. 10.

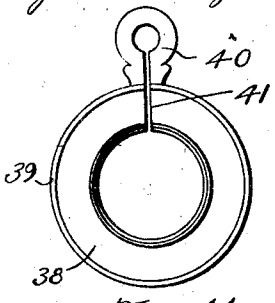


Fig. 11.



Fig. 12

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Patented Sept. 14, 1926. 1,599,862

UNITED STATES PATENT OFFICE.

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TRIAL RING.

Application filed November 26, 1923. Serial No. 677,160.

The present invention relates to an improved form of trial ring and has particular reference to a trial ring wherein the lenses may be removed and replaced with ease.

An important object of this invention is to provide a trial ring of this nature wherein the lens will be normally held securely in position while at the same time when it is so desired, it may be removed and a new lens put in place.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawings, wherein like numerals are employed to designate like parts throughout the same,

Figure 1 is a front elevation of one form of ring wherein the handle is molded in place,

Figure 2 is a front elevation of another form of ring wherein a rim is placed around the same,

Figure 3 is a slightly modified form thereof,

Figure 4 is another form of ring,

Figures 5, 6 and 7 illustrate similar rings,

Figures 8, 9 and 10 show a modified form of lens retaining means,

Figure 11 shows an expansible ring, and

Figure 12 is a vertical transverse section therethrough.

In the drawings, wherein for the purposes of illustration are shown the preferred embodiments of my invention, the numeral 15 designates a ring formed from bakelite, wherein the metal handle 16 may be molded in the ring 15, or it may be riveted on the outside by means of the rivet 17 which is shown in dotted lines. A suitable flange 18 is provided to form a seat for a suitable lens.

In Figure 2 the numeral 19 designates the bakelite ring around which is clamped a metal rim 20, which is held in place by means of the bolt 21, said ring terminating in a handle 22. A lens 23 is pressed in or cemented in place upon the flange 24 of the ring 19. In Figure 3 the ring 19 is splited as at 25 to allow the said bakelite ring to expand slightly to allow for the insertion of a lens, after which the bolt 21 is securely fastened, thus drawing the rim 20 together and securely holding the lens in place.

In Figure 4 the ring 26 and the handle 27 are formed from an integral structure having a slit 28 connecting between the aperture 29 and the hole 30 in the handle 27. As is shown in Figure 6, a flange 31 is provided to hold a lens in position. It will be seen that by reason of the slit 28, the ring 26 may be enlarged sufficiently for the introduction of the lens within its seat, after which the ring will snap back into place.

Figure 5 shows a ring having a lens seat like 31, Figure 6, and a slit 28 with no handle portion. This ring may be fitted in a frame like that in Figure 2.

Figure 7 shows a ring constructed like that shown in Figures 5 and 6 with a handle portion 27 like that of Figure 4.

In Figure 8 the bakelite ring 32 is provided with the inwardly extending flange 33 and the outwardly extending flange 34. A metallic rim 35 is seated on the flange 33 which, after the lens has been seated, is crimped thereover to firmly hold the lens in place. In Figure 9 the metallic rim 36 carries the inwardly extending projections 37, forming a seat for the lens, while the opposite end of the rim is crimped over the lens, thus forming an excellent seat and retaining means for the trial lens. In Figure 10 a metallic rim like the rim 36 with the shoulder 37 in Figure 9 is set into the bakelite rim in an internal groove therein, the lens being crimped in as in Figure 9.

In Figures 11 and 12 are shown a slight modification of the ring shown in Figure 4, wherein the bakelite ring 38 is provided with the metallic rim 39. The handle 40 is connected to the rim 39 and a slit 41 passes from the inner surface of the ring to the hole formed in the handle 40, thus allowing the ring to be slightly enlarged to allow the insertion of the lens within the seat 42, after which the metallic rim 39 will cause the bakelite ring to return to its normal position. Although I have specified the bakelite as the preferable material, it is to be understood that other materials may be used such as cellulose compositions or the like, although I have found bakelite to be exceptionally desirable.

It is to be understood that the forms in my invention herewith shown and described are to be taken as preferred embodiment of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the sub-joined claims.

Having thus described my invention, I claim:

1. A trial ring comprising a non-metallic annulus, a metallic seat secured in the inner ring of the annulus, a portion of the metallic seat being adapted to be turned down to overlie the seat in spaced relation thereto.

2. A trial ring comprising a non-metallic annulus, a metallic seat in the inner ring of the annulus having a flange in the plane of the annulus and a flange normal thereto, a lens on the first flange, and a portion of the second flange turned down to overlie the seat in spaced relation thereto.

3. A trial ring comprising a non-metallic annulus, a metallic seat in the inner ring of the annulus, comprising a flange in the plane of the annulus, a flange normal thereto, and another flange in the plane of the annulus secured to the annulus to hold the seat therein, a portion of the normal flange turned down to overlie the seat in spaced relation thereto.

4. A trial ring comprising a composition annulus and a seat in the inner ring of the annulus, comprising a metallic ring having a flange secured to the annulus, a flange forming a seat, and a flange normal thereto adapted to be bent down to overlie the seat in spaced relation thereto.

5. A trial ring comprising a non-metallic annulus and a metallic seat secured in the inner ring of the annulus having an annular groove, the edges of which overlie each other in spaced relation in the plane of the annulus, the open side of the groove being opposite the side of the metallic seat which contacts with the inner ring of the non-metallic annulus.

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